

State letter accompanies this supplement.

1. Nebraska Background and Status

The State of Nebraska completed the build out of its P25 VHF statewide radio system infrastructure in December 2012. The state uses 700 MHz vehicle repeaters for hundreds of its state radio users to operate on the statewide radio system across the entire state coverage area. Vehicle repeater operation is integral to access the state's VHF mobile radio coverage over approximately 98% of the state territory using 700 MHz portable radios, in addition to supporting multi-jurisdictional law enforcement operations.

The state coordinated with the State of Iowa 700 MHz system buildout to allow state license 700 MHz channels to use omni antennas at the state border for expanded coverage and interoperability across the border. Nebraska upgraded its state subscribers to multiband P25 FDMA/TDMA, VHF/700/800 to make use of the investments in its spectrum resources.

The state coordinated with the populated urban areas to designate state license channels in support of their public safety mobile data infrastructure. These jurisdictions include the Omaha Metropolitan Area, Douglas County, Sarpy County and Washington County, NE and Pottawattamie County, IA. Eventually the mobile data infrastructure will be phased out. The state is in discussion with other counties to upgrade their analog infrastructures to 700/800 MHz P25 phase II simulcast. The state license 700 MHz spectrum is well utilized for multiple cooperative purposes.

2. State License Use and Service Provided

a. Based on Population

Population use is comprised of several counties in the state's most populated areas. The Omaha Metropolitan Area, Douglas County, Sarpy County, and Washington County, Nebraska comprise a population of 772,000 (July 1, 2018 estimate), or 40% of the state population. As mentioned, eventually the mobile data infrastructure will be phased out. The state is in discussion with other counties to upgrade their analog infrastructures to 700/800 MHz P25 phase II simulcast.

b. Based on Territory

The state provides state license 700 MHz frequencies to hundreds of its state users operating vehicle repeaters to access the Nebraska statewide radio system over 98% of the state's 77,421 square miles. These vehicle repeaters are integral to the statewide radio system and its users. The state also uses state license 700 MHz frequencies in support of state special law enforcement operations. **Exhibit A** shows the frequency designations used in the State of Nebraska state license, call sign WPTZ786. **Exhibit B** shows the coverage provided in the statewide radio system.

3. Channels Used in the State Licensee System

The state designated 87 of 96 channels for use as described, with the specific frequency designations shown in **Exhibit A**. The channel designations were coordinated between the state and local jurisdictions, including the State of Iowa, to accommodate state-to-state interoperability, fixed mobile data systems, subscriber radios and vehicle repeater operation statewide. State users operate their trunked radio talkgroups through vehicle repeaters to maintain communications with the VHF statewide radio system and with state and local dispatch centers statewide.

4. Whether the State Licensee is making its showing based upon population or territory

The State of Nebraska showing is based primarily on territory, in addition to substantial portions of population areas and state border interoperability with Iowa.

5. The percentage of territory or population that is served in Nebraska

The coverage map labeled **Exhibit B** shows the statewide coverage footprint, which covers approximately 98% of the state area. Urban population based mobile data systems and subscriber radios accounts for 40% of the state population, as listed in **Exhibit C**.

6. Nebraska System Footprint Based on the 40 dBuV/m F(50,50) Service Contour or an Alternate Signal Level Value

The Tri-County urban area mobile data system uses the 40 dBuV/m F(50,50) service contour as shown in **Exhibit D** and site locations are shown in **Exhibit E**. The State of Nebraska and State of Iowa agreed to not limit Iowa site contours and allow use of omni antennas at full power to enable coverage access to Iowa's system for border interoperability. The state operates multiband mobiles and portables to access any P25 FDMA/TDMA, VHF/700/800 systems within and adjacent to the state.

7. If any portion of a State Licensee's showing is based upon unconstructed facilities, information showing that the licensee has received funding approval for that portion of the system.

The Nebraska statewide radio system, Iowa statewide radio system and Tri-County mobile data system are fully constructed and operational.

Exhibit A**Channel Use****Narrowband (12.5 KHz) 769-775 MHz and 799-805 MHz Bands**

Narrowband 12.5 KHz 769-775 MHz and 799-805 MHz Bands						State of Nebraska	State of Nebraska	City of Lincoln	State of Iowa	State of Missouri	
Base Channel	Frequency	Allocation		Mobile Channel	Frequency	Allocation	State/Local	State/Local	Simulcast Site 23	ISICS	MOSWIN
25	769.15625	State license		985	799.15625	State license	Patrol DVRS 1			Clarinda/Shenandoah Simulcast	
27	769.16875	State license		987	799.16875	State license	Patrol DVRS 5			Shelby	Maryville
29	769.18125	State license		989	799.18125	State license	DMV DVRS			Monona	
31	769.19375	State license		991	799.19375	State license	Patrol DVRS 6			Atlantic	
33	769.20625	State license		993	799.20625	State license	Patrol DVRS 2			Council Bluffs Simulcast / Plymouth	
35	769.21875	State license		995	799.21875	State license	Patrol Dvrs 9				
65	769.40625	State license		1025	799.40625	State license	Patrol DVRS 3			Clarinda/Shenandoah Simulcast	
67	769.41875	State license		1027	799.41875	State license	Patrol DVRS 10			Shelby	Maryville
69	769.43125	State license		1029	799.43125	State license	Patrol DVRS 7			Monona	
71	769.44375	State license		1031	799.44375	State license	Patrol DVRS 8			Atlantic	
73	769.45625	State license		1033	799.45625	State license	Patrol DVRS 4			Council Bluffs Simulcast / Plymouth	
75	769.46875	State license		1035	799.46875	State license	Patrol DVRS 11 CAP SEC				
105	769.65625	State license		1065	799.65625	State license	SFM DVRS			Clarinda/Shenandoah Simulcast	
107	769.66875	State license		1067	799.66875	State license				Shelby	Maryville
109	769.68125	State license		1069	799.68125	State license	Washington County MO3	Patrol CAP SEC 12		Monona	
111	769.69375	State license		1071	799.69375	State license	Dodge County Sheriff MO3			Atlantic	
113	769.70625	State license		1073	799.70625	State license	OCIO DVRS			Council Bluffs Simulcast / Plymouth	
115	769.71875	State license		1075	799.71875	State license					
145	769.90625	State license		1105	799.90625	State license	Patrol EP 13			Clarinda/Shenandoah Simulcast	
147	769.91875	State license		1107	799.91875	State license	AG VRX MO/MO3			Shelby	Maryville
149	769.93125	State license	1109	799.93125	State license				Monona		

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151	769.94375	State license	1111	799.94375	State license				Atlantic	
153	769.95625	State license	1113	799.95625	State license	NPPD MO3			Council Bluffs Simulcast / Plymouth	
155	769.96875	State license	1115	799.96875	State license					
185	770.15625	State license	1145	800.15625	State license	Patrol Conventional Secure			Clarinda/Shenandoah Simulcast	
187	770.16875	State license	1147	800.16875	State license				Shelby	Maryville
189	770.18125	State license	1149	800.18125	State license	Patrol Conventional Secure			Monona	
191	770.19375	State license	1151	800.19375	State license				Atlantic	
193	770.20625	State license	1153	800.20625	State license	Patrol Conventional Secure			Council Bluffs Simulcast / Plymouth	
195	770.21875	State license	1155	800.21875	State license					
225	770.40625	State license	1185	800.40625	State license				Clarinda/Shenandoah Simulcast	
227	770.41875	State license	1187	800.41875	State license				Shelby	Maryville
229	770.43125	State license	1189	800.43125	State license	Washington County MO3			Monona	
231	770.44375	State license	1191	800.44375	State license				Atlantic	
233	770.45625	State license	1193	800.45625	State license				Council Bluffs Simulcast / Plymouth	
235	770.46875	State license	1195	800.46875	State license	State DVRS/Iowa Coordination				
265	770.65625	State license	1225	800.65625	State license	State DVRS/Iowa Coordination				
267	770.66875	State license	1227	800.66875	State license	State DVRS/Iowa Coordination				
269	770.68125	State license	1229	800.68125	State license	State DVRS/Iowa Coordination				
271	770.69375	State license	1231	800.69375	State license	State DVRS/Iowa Coordination				
273	770.70625	State license	1233	800.70625	State license	State DVRS/Iowa Coordination				
275	770.71875	State license	1235	800.71875	State license	State DVRS/Iowa Coordination				
305	770.90625	State license	1265	800.90625	State license	State DVRS/Iowa Coordination				
307	770.91875	State license	1267	800.91875	State license	State DVRS/Iowa Coordination				
309	770.93125	State license	1269	800.93125	State license	State DVRS/Iowa Coordination				
311	770.94375	State license	1271	800.94375	State license	State DVRS/Iowa Coordination				
313	770.95625	State license	1273	800.95625	State license	State DVRS/Iowa Coordination				

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315	770.96875	State license	1275	800.96875	State license	State DVRS/Iowa Coordination				
645	773.03125	State license	1605	803.03125	State license	Pottawattamie County HPD			Cherokee	
647	773.04375	State license	1607	803.04375	State license	Pottawattamie County HPD			Harrison	
649	773.05625	State license	1609	803.05625	State license	Sarpy County HPD			Denison	
651	773.06875	State license	1611	803.06875	State license	Sarpy County HPD				
653	773.08125	State license	1613	803.08125	State license	Douglas County HPD				
655	773.09375	State license	1615	803.09375	State license	Douglas County HPD				
685	773.28125	State license	1645	803.28125	State license	Pottawattamie County HPD			Red Oak/North/South & Cherokee	
687	773.29375	State license	1647	803.29375	State license	Pottawattamie County HPD			Harrison	
689	773.30625	State license	1649	803.30625	State license	Sarpy County HPD			Denison	
691	773.31875	State license	1651	803.31875	State license	Sarpy County HPD				
693	773.33125	State license	1653	803.33125	State license	Douglas County HPD				
695	773.34375	State license	1655	803.34375	State license	Douglas County HPD				
725	773.53125	State license	1685	803.53125	State license	Sarpy County HPD			Cherokee	
727	773.54375	State license	1687	803.54375	State license	Sarpy County HPD			Harrison	
729	773.55625	State license	1689	803.55625	State license				Denison	
731	773.56875	State license	1691	803.56875	State license					
733	773.58125	State license	1693	803.58125	State license	Pottawattamie County HPD				
735	773.59375	State license	1695	803.59375	State license	Pottawattamie County HPD				
765	773.78125	State license	1725	803.78125	State license	Pottawattamie County HPD			Red Oak/North/South & Cherokee	
767	773.79375	State license	1727	803.79375	State license	Pottawattamie County HPD	NPPD MO3		Harrison	
769	773.80625	State license	1729	803.80625	State license				Denison	
771	773.81875	State license	1731	803.81875	State license					
773	773.83125	State license	1733	803.83125	State license	Douglas County HPD				
775	773.84375	State license	1735	803.84375	State license	Douglas County HPD				
805	774.03125	State license	1765	804.03125	State license		Buffalo County		Red Oak/North/South & Cherokee	

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807	774.04375	State license	1767	804.04375	State license		Buffalo County		Harrison	
809	774.05625	State license	1769	804.05625	State license		Buffalo County		Denison	
811	774.06875	State license	1771	804.06875	State license		Buffalo County			
813	774.08125	State license	1773	804.08125	State license	Douglas County HPD	Buffalo County			
815	774.09375	State license	1775	804.09375	State license	Douglas County HPD	Buffalo County	Lincoln LSO DVRS		
845	774.28125	State license	1805	804.28125	State license		Buffalo County		Red Oak/North/South & Cherokee	
847	774.29375	State license	1807	804.29375	State license		Buffalo County		Harrison	
849	774.30625	State license	1809	804.30625	State license		Buffalo County		Denison	
851	774.31875	State license	1811	804.31875	State license		Buffalo County			
853	774.33125	State license	1813	804.33125	State license	Douglas County HPD				
855	774.34375	State license	1815	804.34375	State license	Douglas County HPD		Lincoln LPD DVRS		
885	774.53125	State license	1845	804.53125	State license	Douglas County HPD				
887	774.54375	State license	1847	804.54375	State license	Douglas County HPD				
889	774.55625	State license	1849	804.55625	State license					
891	774.56875	State license	1851	804.56875	State license					
893	774.58125	State license	1853	804.58125	State license	Douglas County HPD				
895	774.59375	State license	1855	804.59375	State license	Douglas County HPD		Lincoln LFR DVRS 1		
925	774.78125	State license	1885	804.78125	State license	Douglas County HPD				
927	774.79375	State license	1887	804.79375	State license	Douglas County HPD	Saunders County Jail MO			
929	774.80625	State license	1889	804.80625	State license					
931	774.81875	State license	1891	804.81875	State license					
933	774.83125	State license	1893	804.83125	State license	Douglas County HPD				
935	774.84375	State license	1895	804.84375	State license	Douglas County HPD	OPPD Ft Calhoun MO	Lincoln LFR DVRS 2		

Exhibit B

Nebraska Statewide Radio System Coverage

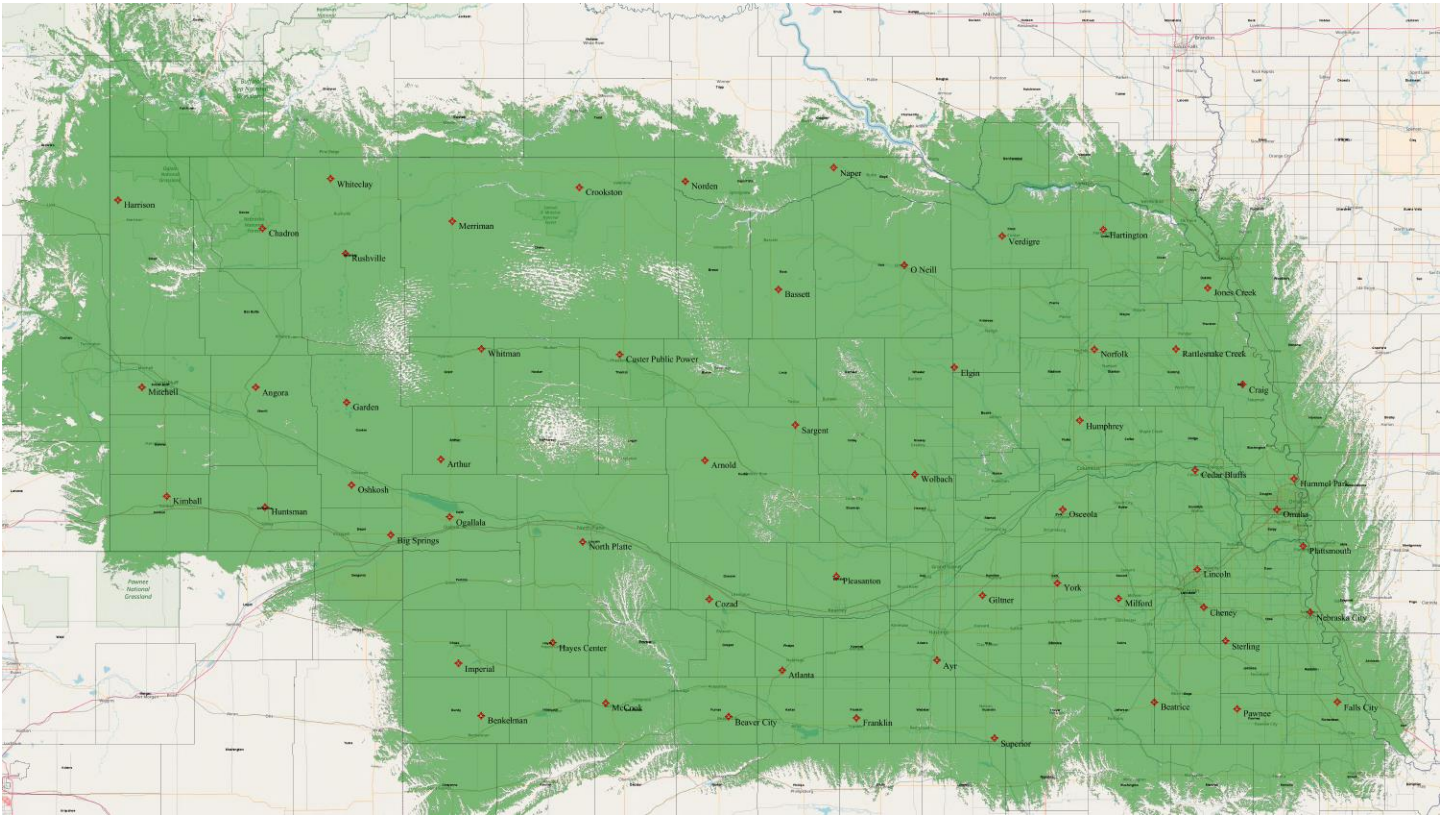


Exhibit C

Nebraska 700 MHz Use by Population*

State Population	1,929,268
Douglas County Population	566,880
Sarpy County Population	184,459
Washington County Population	20,667
Tri-County Population Total	772,006
Tri-County Percent of State Population	40%

* Estimate July 1, 2018

Exhibit D

Tri-County 700 MHz Mobile Data 40 dBuV/m F(50,50) Service Contours

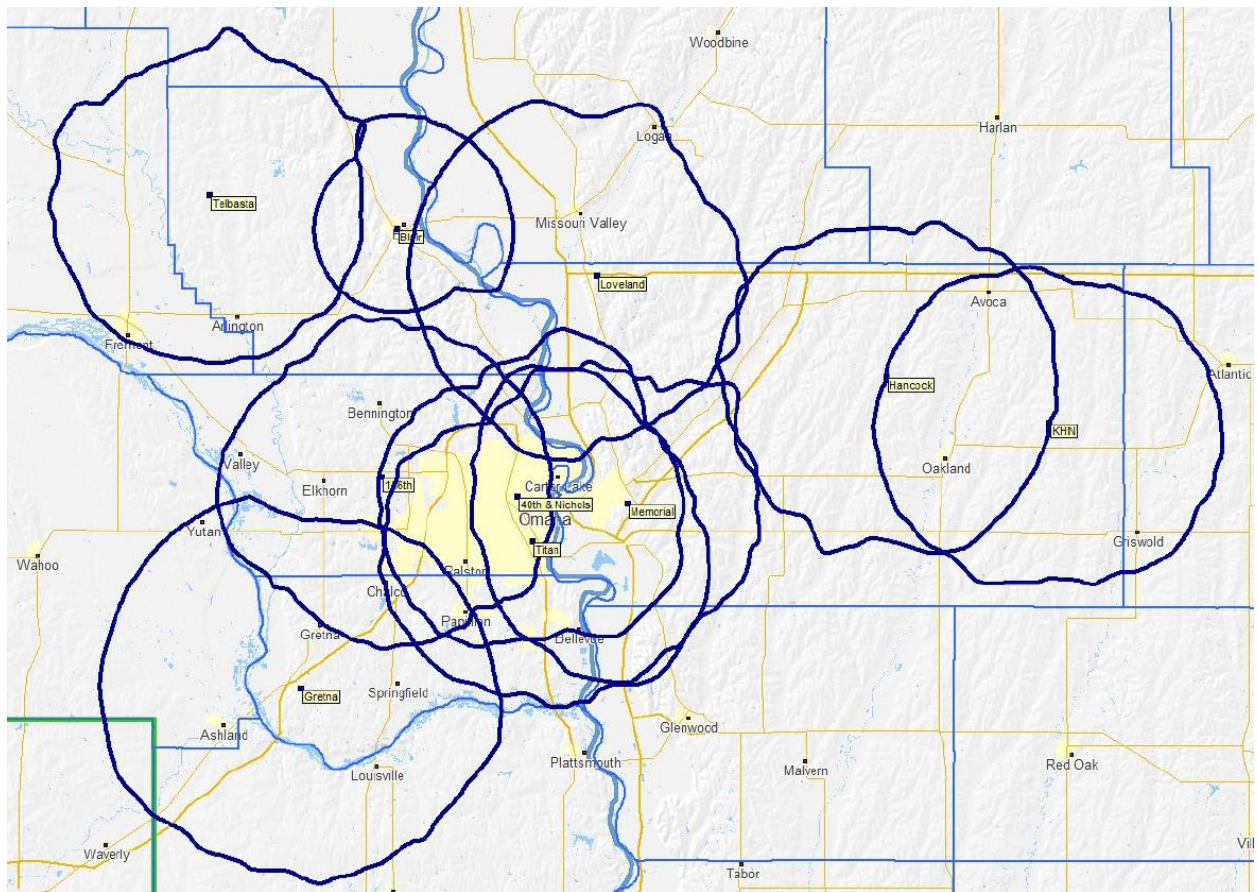


Exhibit E**Tri-County 700 MHz Mobile Data Sites**

Tower	Latitude	Longitude	AMSL (m, ft)	AAT (m, ft)
156th	41 17 25 N	96 9 20 W	384, 1259.9	27, 88.6
	ERP (dBm, W)	Antenna	Ant HT (m, ft)	HAAT (m, ft)
	51.8, 149.7	101-83B-09-0-03N-745.adf	91.4, 300	118.5, 388.6
40th & Nich	41 16 13 N	95 58 21 W	377, 1236.9	44.4, 145.7
	ERP (dBm, W)	Antenna	Ant HT (m, ft)	HAAT (m, ft)
	52.3, 170.3	101-83B-09-0-03N-745.adf	56.4, 185	100.8, 330.7
Blair	41 32 25 N	96 8 7.1 W	331, 1086	-14.1, -46.3
	ERP (dBm, W)	Antenna	Ant HT (m, ft)	HAAT (m, ft)
	51.8, 149.6	101-83B-09-0-03N-745.adf	30.5, 100	53.8, 176.5
Gretna	41 4 35 N	96 15 48.1 W	393, 1289.4	46.4, 152.4
	ERP (dBm, W)	Antenna	Ant HT (m, ft)	HAAT (m, ft)
	50.9, 123.8	101-83B-09-0-03N-745.adf	115.8, 380	162.3, 532.4
Hancock	41 23 26.8 N	95 28 32.8 W	381, 1250.1	9.9, 32.3
	ERP (dBm, W)	Antenna	Ant HT (m, ft)	HAAT (m, ft)
	52, 160.3	101-83B-09-0-03N-745.adf	106.7, 350	116.5, 382.4
KHIN	41 20 40.9 N	95 15 21 W	405, 1328.8	33.5, 109.9
	ERP (dBm, W)	Antenna	Ant HT (m, ft)	HAAT (m, ft)
	52.5, 176.1	101-83B-09-0-03N-745.adf	91.4, 300	124.9, 409.9
Loveland	41 29 35.87 N	95 51 58.03 W	403, 1322.2	70.5, 231.3
	ERP (dBm, W)	Antenna	Ant HT (m, ft)	HAAT (m, ft)
	52.8, 191.2	101-83B-09-0-03N-745.adf	53.3, 175	123.8, 406.3
Memorial	41 15 48.1 N	95 49 29 W	378, 1240.2	42.7, 140.2
	ERP (dBm, W)	Antenna	Ant HT (m, ft)	HAAT (m, ft)
	52.2, 167.4	101-83B-09-0-03N-745.adf	59.4, 195	102.2, 335.3
Telbasta	41 34 28.9 N	96 23 14 W	406, 1332.1	23.3, 76.5
	ERP (dBm, W)	Antenna	Ant HT (m, ft)	HAAT (m, ft)
	51.8, 149.6	101-83B-09-0-03N-745.adf	91.4, 300	114.8, 376.5
Titan	41 13 29 N	95 57 10.6 W	362, 1187.7	35.1, 115.2
	ERP (dBm, W)	Antenna	Ant HT (m, ft)	HAAT (m, ft)
	52.2, 166.1	101-83B-09-0-03N-745.adf	78, 256	113.1, 371.2